| Notice of Allowability | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/752,112 | DUNCAN ET AL. | |
| | Examiner | Art Unit | |
| | VAN H. NGUYEN | 2194 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *RCE filed 10/28/05 and the amendments on 01/16/06*.

2. ☒ The allowed claim(s) is/are *1, 4-11 and 14-20 (now renumbered as 1-16)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   **Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

## *EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE*

**I. EXAMINER'S AMENDMENT:**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Lindsay G. McGuinness (Reg. No.38, 549) on January 16, 2006.

3. **The application has been amended as follows:**

**In the Claims:**

A. **All previous copies of claims 1, 4, 5, 11, 14, and 15 have been replaced with the following clean copy of claims 1, 4, 5, 11, 14, and 15 as amended by the Examiner's amendment:**

**Claim 1.** A method for classifying a remote procedure call from a client system in a first network that initiates connections to a remote server in a second network via a classifying edge router using a client and underlying remote procedure call transport code, the method comprising:

detecting when a connection for the remote procedure call is created;

using a side channel to communicate flow information associated with the detected connection to the classifying edge router, the flow information including a port number associated with the communication, the flow information provided to enable the classifying edge router to assign a quality of service classifier to the remote procedure call for appropriately prioritized transfer to the second network; and

incorporating the flow information into a differentiated services classification subsystem of the classifying edge router by associating the equality of service level to the detected connection; and

wherein the detecting comprises:

providing an Application Programming Interface (API) to calling applications;

detecting when the applications call the API; and

executing a remote procedure routine based on a call by an application, the remote procedure routine including forwarding the flow information to the classifying edge router via the side channel; and

wherein:

the executing comprises accessing a remote procedure call API; and

the API provided to the calling applications includes functionality duplicative of remote procedure call API functionality.

**Claim 4.** The method of claim 1, wherein:

the executing comprises accessing a remote procedure call API; and the API provided to the calling applications presents an interface duplicative of the remote procedure call API to the calling applications.

**Claim 5.** The method of claim 1, further comprising:

obtaining flow information from an application call to the API; and

providing the flow information to the classifying edge router via the side channel.

**Claim 11.** An apparatus for classifying a remote procedure call from a client system in a first network that initiates connections to a remote server in a second network via a classifying edge router using a client and underlying remote procedure call transport code, the apparatus comprising:

a module configured to detect when a connection for the remote procedure call is created;

a module configured to use a side channel to communicate flow information associated with the detected connection to the classifying edge router, wherein the flow information includes a port number associated with the remote procedure call, the flow information provided to enable the classifying edge router to assign a quality of service classifier to the remote procedure call for appropriately prioritized transfer to the second network; and

a module configured to incorporate the flow information into a differentiated services classification subsystem of the classifying edge router by associating the equality of service level to the detected connection; and

wherein the detecting module is further configured to:

provide an Application Programming Interface (API) to calling applications;

detect when the applications call the API; and

execute a remote procedure routine based on a call by an application, the remote procedure routine including forwarding the flow information to the classifying edge router via the side channel; and

wherein:

the detecting module is further configured to access a remote procedure call API; and

the API provided to the calling applications includes functionality duplicative of remote procedure call API functionality.

**Claim 14.** The apparatus of claim 11, wherein the detecting module is further configured to access a remote procedure call API; and the API provided to the calling applications presents an interface duplicative of the remote procedure call API to the calling applications.

**Claim 15.** The apparatus of claim 11, wherein the side channel module is further configured to:

obtain flow information from an application call to the API; and

provide the flow information to the classifying edge router via the side channel.

**B. Claims 2, 3, 12, and 13 have been cancelled.**

**II. REASONS FOR ALLOWANCE:**

1. The following is an examiner's statement of reasons for allowance:

2. Formal drawings filed on December 29, 2000 are acceptable.

3. The prior art does not expressly teach or render obvious the invention as recited in independent claims 1 and 11 as amended above.

4. Moore et al. (U.S. 6,408,342) discloses a method for classifying a remote procedure call from a client system in a first network that initiates connections to a remote server in a second network via a classifying edge router using a client and underlying remote procedure call transport code, the method comprising: detecting when a connection for the remote procedure call is created; using a side channel to communicate flow information associated with the detected connection to the classifying edge router, the flow information including a port number associated with the communication, the flow information provided to enable the classifying edge router to assign a quality of service classifier to the remote procedure call for appropriately prioritized transfer to the second network; and incorporating the flow information into a differentiated services classification subsystem of the classifying edge router as described in independent claims 1 and 11 [see fig. 2; col.7, lines 20-40; col. 8, lines 30-55; col10, lines 40-63; col.13, lines 11-27; col.19, lines 15-46; and col.58, lines 1-6]. However, the claimed *"associating the equality of service level to the detected connection; wherein the detecting comprises: providing an Application Programming Interface (API) to calling applications; detecting when the applications call the API; and executing a remote procedure routine based on a call by an application, the remote procedure routine including forwarding the flow information to the classifying edge router via the side channel; and wherein the executing*

*comprises: accessing a remote procedure call API; and the API provided to calling applications includes functionality duplicative of remote procedure call API functionality",* when taken in the context of the claims as a whole, was not uncovered in the prior art teachings.

5. Nor were references uncovered that would have provided a basis of evidence for asserting a motivation that one of ordinary skill level in the art at the time the invention was made, knowing of a method for classifying a remote procedure call in this specific environment, would have integrated or modified to teach the method classifying a remote procedure call from a client system in a first network that initiates connections to a remote server in a second network via a classifying edge router using a client and underlying remote procedure call transport code with the specific features as recited in the context of independent claims 1 and 11.

6. Dependent claims are allowed as they depend upon allowable independent claims.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM THOMSON can be reached at (571) 272-3718.

The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**
Commissioner for patents
P O Box 1450
Alexandria, VA 22313-1450

VHN

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SUPERVISORY PATENT EXAMINER